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ABSTRACT

The No Child Left Behind Act of 2001 poses unique challenges for rural schools and districts. Small schools are more likely to be labeled as needing improvement due to the volatility of annual test scores for small student populations. Rural districts are limited in their capacity to provide parents with school choice, and rural districts face greater challenges than their urban or suburban counterparts in attracting and retaining "highly qualified" teachers. The major obstacle facing rural districts is access to resources. Under current funding formulas, many rural districts do not have access to the financial resources that urban and suburban districts have. While these challenges seem daunting, they are not insurmountable. Test scores can be averaged over several years. Supplemental services can be made available through distance learning, community colleges, after-school programs, libraries, or faith-based organizations. Teachers could be offered incentives to work in less attractive locales. Teachers could be recruited among local residents. Schools can form consortia to build distance learning programs and infrastructure. However, rural schools and districts will need federal and state assistance to implement these strategies. The ability of rural schools and districts to comply with federal law will depend, in large part, on the future direction of related federal and state policies. It is essential that policymakers be made aware of the unique challenges faced by rural schools and the importance of developing policies that address those unique challenges. (Contains 26 references) (TD)

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Implementing the No Child Left Behind Act: Implications for Rural Schools and Districts

January 2003

By
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Executive Summary

The No Child Left Behind Act of 2001 (NCLB) presents challenges for schools and districts to ensure that all students meet state standards for proficiency by 2014 and that, by 2006, all teachers are highly qualified. Because of small student populations and geographic isolation, these requirements are uniquely problematic for rural schools and districts.

While the challenges are not insurmountable, rural schools and districts will require assistance and guidance from federal and state policymakers to effectively build the local capacity necessary to comply with NCLB.

This paper includes a discussion of the unique challenges NCLB presents for rural schools and suggests strategies that hold promise for helping rural schools meet federal requirements.

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Introduction

The No Child Left Behind Act of 2001 (NCLB) continues the emphasis established in the previous reauthorization of the Elementary and Secondary Education Act (1994) on holding all students to the same academic standards. The 2001 legislation builds on the foundation laid by the 1994 reauthorization and expands the federal role in public education by requiring stronger school accountability, more stringent qualifications for teachers, and an emphasis on programs and strategies with demonstrated effectiveness. The legislation is focused on ensuring all students meet state standards by 2014 and that achievement gaps based on ethnicity, race, income, and language are closed. The provisions of the law were designed to ensure that all students make adequate yearly progress toward achieving "proficiency" on state standards within 12 years.

The goals of the new law will challenge states, districts, and schools in ways that will require them to rethink the structure, organization, and delivery of education in public schools. While all states, districts, and schools will face some difficulty in implementing the new law, the circumstances of rural districts and schools create unique challenges. The small populations and geographical isolation of many rural schools and districts greatly affects access to resources, thereby affecting a school district's ability to build the capacity necessary to comply with NCLB. Some of the challenges facing rural schools and districts are not insurmountable. However, they cannot be overcome without assistance and guidance. State and federal policies will be instrumental in helping rural schools address these challenges.

The federal government, through Title IV of NCLB, the Rural Education Achievement Program (REAP), has taken an important first step toward addressing the specific challenges associated with being a small and rural school district. Continued federal support, combined with state policies and programs targeting the unique needs of rural areas, will be helpful as rural schools and districts work to comply with NCLB.

While rural school districts are dealing with many of the same issues facing urban districts, including poverty and diversity, the new requirements of NCLB create challenges unique to rural areas. The components of the law that pose the greatest problems for rural schools and districts are those focused on school accountability and teacher qualifications. This brief outlines the challenges rural schools and districts will face as they work to implement the federal requirements for accountability and teacher quality. Also included is a discussion of the Rural Education Achievement Program and its potential to assist rural schools and districts in complying with NCLB. Finally, this brief will make note of promising state and district programs that provide possible strategies for addressing the challenges rural schools and districts face in implementing NCLB.

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Demographic Characteristics of Rural Districts and Schools

According to the National Center for Education Statistics (NCES), in 1999/2000 there were 89,594 public schools in the U.S., of which 37,548 were located in rural areas or small towns. Schools in rural areas or small towns account for about 42 percent of all schools in the nation and 30 percent of all students (U.S. Department of Education, 2001)[1]. Characteristics unique to rural areas include geographic isolation, small populations, and declining enrollments. Rural schools and districts tend to be smaller than their urban and suburban counterparts. The average urban U.S. school enrolls about 634 students, compared to rural schools that average about 400 students (NEA, 1998). Moreover, most rural school districts are comprised of one, two, or three schools, whereas urban/suburban districts can have hundreds of schools.

In many rural areas, school enrollment is decreasing. In 22 states, more than half of all rural schools lost students between 1994 and 1997 (AASA, 2000). Declining enrollments mean declining budgets. Because most school funding formulas are based on either average daily enrollment or cost per pupil, when students leave schools, so does funding. Faced with declining enrollments, schools must cut expenses or raise revenues. Too frequently, schools are forced to cut programs and/or staff, close schools and/or consolidate. Of all the school consolidations between 1986 and 1993, 59 percent were in small rural districts (Howley & Bickel, 2000).

The demographic characteristics of rural schools and districts affect the availability of funding and access to programs, services, and training opportunities. This lack of access plays a large role in the ability of rural districts to build local capacity to comply with NCLB.

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Financial Characteristics of Rural Schools and Districts

Numerous studies have documented the disparities in educational funding. Widespread agreement exists that funding disparities among urban, suburban, and rural districts are largely the result of a dependence on local property tax revenues. School districts with high-priced residential or commercial property have substantially greater resources available to support education (Hadderman, 1999). Therefore, states' reliance on property taxes as the primary source of funding for public schools put rural districts at a disadvantage. For example, in North Carolina in 2000, the state's ten most affluent counties had $877,807 in taxable real estate available for every public school student compared to $208,853 for the ten least affluent counties (North Carolina Public School Forum, 2001). The wealthiest counties average effective tax rate is .444, whereas the poorest counties tax rate is .729. The poorest counties tax themselves at a 61 percent higher rate than the wealthiest counties. The dependence on local property taxes leaves poorer rural districts with few alternatives for increasing revenue.

In addition, many federal programs' funding formulas place small school districts at a disadvantage through preferences for schools and districts with large numbers of low-income residents. Oftentimes, the costs of applying for federal funds outweigh the benefits. Because the formulas allocate funds on a per-pupil basis, the amounts received by small districts are often so small that little or nothing can be done with the money. Whereas many urban districts employ a professional grant writer, small rural districts must rely on district staff to complete the grant applications on top of their other educational and administrative duties. In many cases, collecting the formula allocation is not worth the paperwork and effort for such a small sum of money. In the past, to address this problem, small schools have been allowed to join consortia and share resources with other schools. However, rural schools are frequently too far apart geographically for a consortium to be a viable solution.

Also, the small student population in many rural schools and districts does not allow these schools to derive the benefits of economies of scale. All school districts must maintain a certain set of services—facilities, staff, transportation, food service, etc. The cost to provide these services is greater for a small school. The smaller the school district, the more it costs per-pupil to provide transportation or staff. For example, it is less cost effective to run a school bus for ten students than for 50 students. As a result, small districts spend a greater proportion of their budget on transportation than do urban districts. The same applies to resource personnel and education specialists. It does not matter whether a school has 1,000 students or 50 students, a reading specialist costs about the same. In a large school, the salary for the specialist is absorbed by hundreds or even thousands of students. In a small school, the salary would be absorbed by only 50 students or less. The Rural Education Achievement Program was designed to address these issues.

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Rural Education Achievement Program

The Rural Education Achievement Program (REAP), Title VI, Part B of the No Child Left Behind Act of 2001, was designed to provide financial resources and flexibility to rural districts. It is meant to provide resources to districts whose operations are affected by location and small student enrollment to assist them in raising student achievement. Through two separate programs, financial assistance is provided to rural districts in two categories: small and low-income. In addition, the Alternative Uses of Funds Authority, the third component of REAP, allows rural districts to consolidate funds. Eligible districts may consolidate funds from various federal programs, including Teacher Quality grants, Local Technology grants, Safe and Drug Free Schools and Innovative Programs. The consolidated funds may be spent on teacher recruitment, professional development, education technology, parental involvement activities, activities included in Safe and Drug Free Schools program, activities included in Title I, Part A, and bilingual and emergency immigrant education. Approximately 6,000 schools are currently eligible for REAP programs.

For the first time, through REAP, the federal government has targeted funding directly to rural schools. While the average award size is only about $20,000, for many rural districts, the awards will almost double the amount of federal funding they receive. Many districts plan to use the additional resources to address staffing needs or to sustain existing programs. Moreover, the ability to transfer funds from various federal programs will allow small districts to more effectively target resources where they are most needed.

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Rural Challenges and No Child Left Behind

Accountability

NCLB specifies that states must develop Adequate Yearly Progress (AYP) objectives for improved achievement of all students and for specific student subgroups (economically disadvantaged, major racial and ethnic groups, students with disabilities, and students with limited English proficiency). The AYP objectives must be assessed at the school level and must be reported separately for each subgroup of students. States have flexibility in defining AYP and in setting the number of students required to form a statistically valid subgroup.

Small schools, many of which are rural, are in greater danger of being mislabeled as "in need of improvement" than large schools due to the volatile nature of school-level reporting from year to year (Figlio, 2002; Kane & Staiger, 2002; Linn et al., 2002). If fewer than 100 students are tested in each grade, averages may fluctuate significantly from year to year for reasons that are often unrelated to overall school performance. Test score volatility arises from two sources (Linn et al., 2002). First, variation in the groups of students being tested each year can cause fluctuations. Contributing factors may include the attitudes and abilities of students in each cohort, student mobility, or an influx of immigrants. Secondly, one-time factors such as teacher turnover, a flu epidemic, or construction noise on the day of testing can also affect scores (Linn et al., 2002). In small student populations, these differences can cause dramatic fluctuations in annual average test scores.

One way of reducing the volatility in school level test scores is to average test scores over several years, a remedy allowed under NCLB. A study by David Figlio (2002) indicates that the stabilizing benefit of a three-year rolling average is greatest among smaller schools. In an analysis of school level data from two Florida districts, Figlio found that, for the smallest fourth of schools, going from a one-year to a three-year average reduced the number of "unstable" schools (schools that appear to improve one year and fall back the next, or vice versa) from 63 percent to 27 percent. For the largest fourth of the schools, the number was reduced from 50 percent to 29 percent.

While Kane and Staiger (2002) agree that utilizing a multiple-year rolling average would be an improvement over the use of one-year averages, they claim there is a more efficient way to measure school performance. Kane and Staiger propose placing more weight on more recent scores for large schools, and placing more equal weight on each of several years' worth of scores for small schools. The flexibility in NCLB permits states to explore alternatives such as these for measuring AYP.

Not only do small schools face the likelihood of being mislabeled in terms of performance, they face obstacles in implementing the sanctions that apply when a school is identified as "in need of improvement." Under NCLB, schools that fail to make AYP over time face increasingly severe interventions. Schools that fail to make AYP for two consecutive years will receive technical assistance from the district, must develop a school improvement plan, and must provide students with public school choice options. Schools that do not meet AYP for three consecutive years are required to provide supplemental education services to low-achieving, low-income students.

Providing parents with school choice poses three challenges for rural schools. First, many rural school districts are either one-building districts or have only one school at a particular grade level. For example, of Nebraska's 692 school districts, only about 50 of those include multiple schools at a given grade level. For these districts, there

are no alternatives within the districts for school choice.

Second, transportation is already a difficult issue in rural districts, and NCLB, through the school choice requirement, will likely only exacerbate the problems associated with transporting students long distances. Rural districts already spend disproportionately on student transportation services. A recent study reported that rural schools spend twice the amount of urban districts on transportation (Killeen & Sipple, 2000). Where rural districts spend upwards of 6 to 8 percent of their budget on transporting students, non-rural districts spend around 4 percent. West Virginia, a largely rural state, spends more of its education dollars on transportation than any other state, nearly 7 percent of its education budget (Eyre & Finn, 2002). Four West Virginia counties spend more than 10 percent of their budgets on busing. This may not seem significant, but when comparing 10 percent of a $900,000 budget to 4 percent of a $9 million budget, the difference becomes dramatic.

Longer bus rides affect more than a district's budget. A recent year-long investigation by the Charleston Gazette-Mail uncovered some disturbing data pertaining to bus rides in rural West Virginia (Eyre & Finn, 2002). For the 2002-2003 school year, more than half of all bus routes in rural West Virginia exceeded "reasonable" distances under its guidelines. Elementary children ride the bus more than an hour each way on more than 300 bus routes in 34 of the state's 35 most rural counties. In addition, elementary children ride with high school students in almost every rural West Virginia county. Students with long bus rides reported that they were stressed and tired, that their grades have dropped, they participate in fewer after-school activities, and they spend less time with their families. Parents whose children attend school far from home attend fewer parent-teacher meetings, volunteer less, and attend fewer extra-curricular activities at the school.

Finally, rural schools are concerned about the public relations problems associated with the school choice requirements of NCLB. Districts must inform parents that, under federal law, if their school is "in need of improvement" they can send their children to another, higher performing school. At the same time, they must tell them that there is no alternative within the district. Under these circumstances, the potential for confusion within the community is great.

While, theoretically, students could attend school in a neighboring district, often this is not a viable option due to the transportation issues outlined above. One possible solution to the lack of choice in rural areas is to encourage districts to offer supplemental services in lieu of school choice alternatives. While supplemental services are not required unless the school fails to meet AYP for three consecutive years, offering supplemental services earlier would provide parents the needed assistance to help their students meet state standards.

The provision of supplemental services in rural areas also presents challenges for districts. However, with some guidance and assistance from state education agencies, the problems could be more easily addressed than those pertaining to school choice.

Under NCLB, states are required to distribute to parents of students in schools "in need of improvement" a list of state-approved service providers. In recent months, states have requested proposals from organizations hoping to provide supplemental services in the state. As states collect and review those proposals, a number of challenges have arisen concerning the provision of services in rural areas.

For example, in some states, the only proposals received have come from large companies such as Sylvan Learning Centers or online companies. This poses a number of problems for rural schools. First, providers do not have to agree to provide services in every school district in the state. Therefore, urban and suburban schools have a distinct advantage in attracting supplemental services in that they are able to create a more lucrative market for providers on the basis of simple economics of scale. In addition, many of the companies applying to provide services do not operate facilities in rural areas. It is unclear whether NCLB will provide enough of an incentive for providers to offer services in rural areas and small towns. Rural districts will likely need to examine alternative means of providing supplemental services.

At first glance, online providers appear to offer a viable alternative for rural schools.

Iowa, a predominantly rural state, received a majority of its supplemental services proposals from online companies. After a thorough review of the proposals, the state reopened the process due to some of the limitations associated with online service/providers.

For example, online programs require a certain degree of maturity and skill on the part of the student. The student must be computer literate and able to work independently in order to make effective use of computer-based programs. As a result, many online providers only offer programs for students in middle and upper grades. The online providers who responded to Iowa's RFP provide services only to students in Grades 5-12. In Iowa, the majority of schools in need of improvement are elementary schools. Another problem associated with online providers is that services would have to be provided at the school itself because many students from low-income families do not have computers at home. The school would have to provide opportunities for students to use the school computers and would have to provide staff to oversee their use.

Another problem facing rural schools is the need to ensure high quality from distance learning service providers. NCLB provides no guidelines for determining and monitoring the quality of supplemental service providers. Due to the limited options in rural areas, rural schools will likely have to take what they can get with little or no assurance of the quality of those services, particularly for online providers.

In order to ensure that rural school students have access to supplemental services, state education agencies might work with rural districts to develop creative solutions to this problem. States could work with rural districts to identify potential providers in the community, such as regional service centers, community colleges, after-school programs, libraries, or faith-based organizations. More importantly, states need to provide guidelines to schools and districts to help them to identify quality service providers. In addition, state education agencies could work with rural schools to develop virtual high schools and other e-learning opportunities. Kentucky's Virtual High School (KVHS) provides a model. KVHS was developed as a way of providing an expanded curriculum to students across the state. KVHS provides advanced placement and foreign language courses, instructional support for at-risk students, and adult education programs. In addition, professional development opportunities are available for educators. This program is part of the technology plan developed as part of the Kentucky Education Reform Act of 1990 to establish a technology network throughout the state to be used, in part, to improve access to high-level curriculum and other support programs in small schools[2]. The virtual high school provides a way of addressing multiple challenges facing rural schools, including the provision of supplemental services.

Teacher Recruitment and Retention

NCLB requires states to ensure that all teachers of core academic subjects are "highly qualified" by the end of 2005-2006. Core academic subjects include English, reading or language arts, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography. The law defines a "highly qualified" teacher as one who is fully licensed or certified by the state. In addition to being fully licensed or certified, teachers must demonstrate competency in the subject they teach. To demonstrate competency, elementary school teachers must pass a state test demonstrating subject knowledge and teaching skills in reading, writing, mathematics and other areas of a basic elementary school curriculum. Middle or secondary level teachers can demonstrate competency in one of three ways: 1.) pass a state test; 2.) complete an academic major, graduate degree, or advanced certification; or 3.) meet the requirements of a state evaluation standard used to judge competency. Given the current circumstances in rural schools, there are a number of potential obstacles facing rural schools and districts in meeting these requirements.

Many rural schools already have difficulty recruiting and retaining teachers, particularly teachers who have credentials in several subject areas, special education teachers, foreign language teachers, and teachers for LEP and bilingual programs. The requirements of NCLB will likely exacerbate the already existing problems, as the new law will increase the demand for "highly qualified" teachers. Increased demand could result in higher competitive salary levels. Low resource schools will face greater disadvantages in attracting and retaining teachers in this more competitive environment. Currently, the difference between average rural teacher salaries and other teacher salaries varies by state from around $250 to as

much as $10,400 (Rural School and Community Trust, 2000). Schools that do not have the resources to compete with larger, wealthier urban and suburban districts and schools will be less able to meet the requirements for a "highly qualified" staff.

The disparities in teacher salaries are due in large part to state funding formulas. Many state funding formulas for teacher salaries are based on housing costs. In areas of declining population, housing is less expensive, and so it is assumed that teachers require less to live in those areas. However, attracting teachers to rural areas does not depend on how much a teacher pays for a house, but rather what it takes to get a teacher to move to an area like the Mississippi Delta. For many teachers, it would take a salary higher than what is offered in urban and suburban schools to attract them to these communities. The inequities in the system result in less attractive locales having a much more difficult time attracting teachers.

The extent to which rural districts have difficulty attracting and retaining teachers varies by location. Geographically isolated communities face greater problems in attracting teachers, while schools located on the outskirts of suburban areas face greater difficulty in retaining teachers. Geographically isolated communities have difficulty attracting teachers to their community because of lower pay and social and professional isolation. Collins (1999), in a review of the literature on rural teacher retention, cites a survey of teacher mobility in one rural district that found that teachers leave communities because of geographic isolation, weather, distance from larger communities and family, and inadequate shopping (Murphy & Angelski, 1996/1997, cited in Collins, 1999). Schools located close to suburban areas are often able to attract teachers, but tend to lose them after only a couple of years. New teachers view these rural areas as attractive places to begin their teaching careers. However, they soon leave for higher paying positions in the nearby suburban schools.

The new certification requirements will likely increase existing disincentives to teach in rural schools, particularly rural secondary schools. Teaching "out of field" is common in small rural high schools. Limited access to a choice of faculty often makes this practice a necessity. Not only is "out of field" teaching common, but teachers also frequently prepare for a number of different courses daily. For example, a science teacher in a small rural high school may teach each of the science courses offered by the school. She may prepare up to five different courses each day. When a job becomes available in a suburban school in which she will be able to teach one or two science courses each day for higher pay, the decision to leave is not a difficult one.

For rural schools, teaching out of field is an issue of economies of scale. Small high schools cannot afford to hire teachers to cover one class each of higher level math and science courses, nor do they have sufficient numbers of students to demand it. Requiring certification for one teacher in more than one subject area will be expensive and time consuming. Combined with the lower salaries paid to teachers in rural schools, more stringent certification requirements will become another disincentive for teachers to take positions in rural schools. Teachers will have to pass multiple tests to be paid half as much as teachers in urban or suburban schools who need to pass one test.

Rural schools and districts have always been creative in recruiting teachers, particularly in hard-to-staff subject areas such as math, special education, and languages. This year, a rural school in Illinois was unable to find a state certified Spanish teacher for its high school. They hired a local woman with a Spanish degree, who had taught in the Community College system, and had the characteristics of an excellent teacher. Soon after she was hired, she enrolled in a program that would enable her to earn certification within one year. Under the new federal law, the school was required to send letters to the parents of students enrolled in the new teacher's Spanish classes informing them that the Spanish teacher was not "highly qualified." The district superintendent found himself in the position of explaining the meaning of not "highly qualified" and trying to reassure parents that their children were receiving a quality education. The superintendent expressed concern that the perception generated by the school's label of not having a highly qualified staff overshadows the good things that the school is doing.

Another example demonstrates the problems faced by rural schools dealing with high rates of teacher turnover. In a small rural district in Illinois, 15 of the 17 teachers in a low performing, rural, one-building high school district in Illinois are new this

year. A number of those do not have a state teaching certificate. The school was unable to attract enough applicants who met the requirements of NCLB. The high rate of teacher turnover in this school has broad consequences. Last year, the school implemented a comprehensive school reform model in an effort to turn the school around. Yet, this year, the majority of teachers who were trained in the model are gone. Now, they must start over.

Recent research on the issue of teacher shortages has identified the problem largely as one of distribution (Darling-Hammond, 2001; Ingersoll, 2001; NASBE, 1998; Olson, 2000; Voke, 2002). According to recent studies, the greatest shortage is among teachers who are both qualified and willing to teach in what have been traditionally hard-to-staff schools. Traditionally hard-to-staff schools include those in highly urban and rural areas, and particularly those schools serving minority or low-income students. A shortage also exists in certain geographic regions in the country, and in particular specialties such as special education, bilingual education, and math and science (NASBE, 1998).

A number of researchers and national education organizations have recently argued that states should focus greater attention on developing programs that target persons who are willing to work in hard-to-staff schools and positions (Ingersoll, 2001; NASBE, 1998; Voke, 2002). However, strategies aimed at increasing the supply of teachers are not likely to be effective if they ignore the high turnover rate (Olson, 2000). While all types of districts report problems retaining new teachers, this problem is particularly pronounced in schools located in low-income areas (Hare & Heap, 2001; NASBE, 1998).

One approach to improving retention frequently used in rural districts is to recruit and train teachers from the local community. By targeting individuals who have ties to the community and the qualities to be good teachers, schools are less likely to lose those teachers after only a few years. Under NCLB, rural districts will have to ensure that teachers recruited from the community are certified, or have access to a teacher certification program before they enter the classroom in 2005-2006. Nevertheless, for rural schools, developing local talent will continue to be an important retention strategy.

Collins (1999) argues that the degree to which a rural teacher becomes involved in the community influences his or her decision to leave or stay; therefore, retention requires a coordinated school-community effort. A school-community orientation helps new teachers overcome feelings of isolation, acquire a sense of community security, and develop professional competence. Collins suggests that principals select a new teacher's initial assignments carefully, set clear goals, welcome feedback, establish an encouraging and nonthreatening environment, and provide opportunities to interact with experienced colleagues and parents. Universities also can play an important role by offering cost-effective distance-learning courses that connect rural teachers to a professional network.

Another option is for states to offer financial incentives to candidates who are qualified and willing to teach in shortage areas or increase the ability of financially disadvantaged districts to pay for qualified teachers (U.S. Department of Education, 2000; NASBE, 1998; National Commission on Teaching and America's Future, 1997). Initiatives should focus on rewarding those willing to teach in high-need areas where teacher retention is problematic by offering higher salaries than the salaries paid in areas and fields in which there is a glut of qualified teachers (NASBE, 1998).

Examples of Effective Strategies for Recruiting and Training Teachers.

Distance learning has been proposed as a strategy for alleviating many of the problems rural schools face in providing a comprehensive curriculum and training teachers. Distance learning allows small schools to offer a more comprehensive curriculum without hiring additional staff. Distance learning also makes it possible for geographically isolated schools to provide professional development for their teachers without incurring the high costs associated with travel. However, it is important to remember that distance learning encompasses a wide variety of technologies with varying degrees of effectiveness. At one end of the spectrum are online courses that are very similar to correspondence courses. Students work at their own pace with little or no interaction with an instructor or other students. At the other end of the spectrum, fully interactive I-TV technology provides a more

classroom-like environment. With I-TV, teachers and students can use technology to interact in real time. As years of research have shown, students perform better when they learn in a structured setting that includes regular interaction with their teacher and their peers. This is also true for teachers participating in professional development. Training is more effective when it is prolonged and hands-on. I-TV enables teachers and students to participate in fully interactive programs that provide hands-on activities and prolonged interaction.

Interactive technology can connect schools that cannot individually afford to hire teachers in advanced subject areas. Schools can create consortia to build I-TV networks in which all schools in the network can both send and receive courses. A physics teacher in school A could send her course to schools B and C. A French teacher in school B could send his course to schools A and C, and so on. Such consortia provide a way to capitalize on the assets of small schools while alleviating the deficiencies.

Interactive technology also has the potential to increase professional development opportunities available to rural teachers. Instead of driving 50 to 100 miles, teachers could participate in fully interactive training sessions without leaving their school. Through I-TV, rural teachers could interact with teachers from around the country to improve their knowledge and skills, all without leaving the school.

Yet, once again, the ability of rural schools to take advantage of interactive technology depends on their access to resources. In this case, it is access to high-speed Internet connections and the resources necessary to support and maintain these kinds of networks that pose problems for rural schools. In order to use interactive technologies, schools need a minimum of a T1 line or "broadband" access to the Internet, a connection able to transmit large amounts of video and data in two directions. Rural schools have limited access to broadband and the cost is highly variable.

The E-rate has had some impact in terms of the cost of Internet access. Schools can receive a discounted rate on telecommunications service. However, that discount does not impact the starting price, which in some rural areas can be as high as $3,000 per month. In addition, some communities are too remote to be served. If the service is not available, the discount is useless. Sparsely populated rural areas do not have the customer base to attract telecommunications companies. Therefore, there is no profit incentive for telecommunications companies to provide service in those areas.

In recent years, a number of initiatives aimed at enticing telecommunications companies to expand broadband services in rural areas have been introduced in Congress. Federal proposals include loans and/or grant programs as well as initiatives modeled after the Rural Electrification Act that brought electricity to rural America. While these proposals have stalled in Congress, a few states have implemented programs that take advantage of bulk buying power to provide the infrastructure for service in remote areas. Missouri provides an example. MOREnet (Missouri Research and Education Network) encouraged the state's telecommunications providers to construct a high-speed network throughout the state. Through this network, MOREnet is able to provide high-speed Internet access to Missouri's public sector, including schools. In addition, GreaterNET, a not-for-profit, member-based organization, brokers I-TV courses across the state and provides support services for participating schools. GreaterNET is part of rural Education Renewal Zones (ERZ) in Missouri aimed at improving rural education and teacher preparation through the use of technology. The ERZ collaboration also includes two teacher-training institutions, a technical college, the state education agency, and a number of technical support organizations.

However, broadband access is just the first step in building effective interactive networks. First, schools and districts must have adequate knowledge of technology, its capabilities, and effective ways of incorporating technology into instruction. Not all technology is created equal. Schools and districts must be able to evaluate technology and service providers to determine their quality and appropriateness. Second, for technology to be effective, teachers and students must be adequately trained to use the technology. Those using the technology must be knowledgeable of the proper operation of the equipment and knowledgeable of ways to maximize the effectiveness of technology to support learning. In addition, schools must provide support and maintenance for the technology. Many schools cannot afford to employ

an on-site technology coordinator to provide support. Once again, the major obstacle facing rural districts is access to resources. Under current funding formulas, many rural districts do not have access to the financial resources needed to take full advantage of the latest technology. Programs such as the one in Missouri are a step toward helping rural schools address problems associated with being small and rural.

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Additional Challenges

NCLB requirements, combined with funding inequities and economy of scale issues, could lead to increased state pressure for school consolidation in rural areas. Rural schools have long been targets for consolidation. It has been widely perceived that consolidation saves money and that students are better served by larger schools that are able to offer a comprehensive curriculum. Yet, a large body of research exists demonstrating the social and educational benefits of small schools. A recent report by the KnowledgeWorks Foundation summarizes this research (Bigler et al., 2002). According to the report, small schools are safer and more conducive to building strong relationships between students and adults. More students who graduate from small schools go on to postsecondary education than students who graduate from large schools. Students in small schools participate more in extracurricular activities. Teacher satisfaction is greater in small schools. Moreover, small schools foster community cohesion by functioning as community and cultural centers, bringing together community residents of all ages and backgrounds. In addition, recent research points to the effectiveness of small schools, particularly with at-risk students. Large schools compound the negative effects of poverty. On average, smaller schools cut the relationship between socioeconomic status and achievement in half compared to larger schools. As grade levels increase, the effect of school size on achievement increases (Howley & Bickel, 2000). The large and growing body of research cited in the report provides evidence that small schools provide enormous benefits to students, teachers, and communities.

The report also cites two recent studies that demonstrate the cost effectiveness of small schools. Historically, data used to demonstrate the cost effectiveness of large schools focused on average costs per student. The studies, one conducted by researchers in New York and the other by researchers in Nebraska, measured the cost of educating students who graduate. Both studies found that for small schools, the cost per graduate was slightly lower than for larger schools. This is because the dropout rates were much lower at small schools.

The requirements of NCLB, without accompanying increases in funds to implement them, will likely result in a push for larger schools. If the goal of the federal government is to improve academic achievement for the students, the research points to increasing support for small schools, not closing them.

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Conclusion

The No Child Left Behind Act of 2001 poses unique challenges for rural schools and districts. Small schools are more likely to be labeled in need of improvement due to the volatility of annual test scores. Rural districts are limited in their capacity to provide parents with school choice, and rural districts face greater challenges than their urban or suburban counterparts in attracting and retaining "highly qualified" teachers.

While these challenges seem daunting, they are not insurmountable. However, rural schools and districts cannot fulfill the requirements of NCLB without federal and state assistance. The ability of rural schools and districts to comply with federal law will depend, in large part, on the future direction of related federal and state policies. It is essential that policymakers be made aware of the unique challenges faced by rural schools and the importance of developing policies that address those unique challenges. Schools and districts vary dramatically in terms of size, characteristics of student population, parent and community support, and availability of resources. The challenges facing schools and districts are not uniform. Therefore, it makes little sense to address the broad range and diversity of problems faced by schools and districts through one-size-fits-all policies. The unique challenges faced by rural schools and districts require federal, state, and district policies specifically targeted to their needs.

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References

American Association of School Administrators. (2000). *Declining enrollments: Silent killer of rural communities.* Arlington, VA: Author.

Bingler, S., Diamond, B., Hill, B., Hoffman, J., Howley, C., Lawrence, B., et al. (2002). *Dollars & sense: The cost effectiveness of small schools.* Cincinnati, OH: KnowledgeWorks Foundation.

Collins, T. (1999). *Attracting and retaining teachers in rural areas.* Charleston, WV: ERIC Clearinghouse on Rural and Small Schools.

Darling-Hammond, L. (2001). The challenge of staffing our schools. *Educational Leadership, 58*(8), 12-17.

Eyre, E., & Finn, S. (2002, August 25). Closing costs. *Charleston Gazette.* www.wvgazette.com/news/Closing Retrieved 9-04-02.

Figlio, David "Aggregation and accountability." In No Child Left Behind: What Will It Take? Papers Prepared for a Conference Sponsored by the Thomas B. Fordham Foundation. Washington, DC: Thomas B. Fordham Foundation. February 2002. pp. 49-70.

Hadderman, M. (1999). Equity and adequacy in educational finance. Eugene, OR: ERIC Clearinghouse on Educational Management, University of Oregon. Retrieved September 24, 2002, from http://eric.uoregon.edu/publications/digests/digest129.html

Hare, D., & Heap, J. L. (2001). *Teacher recruitment and retention strategies in the Midwest: Where are they and do they work?* Naperville, IL: North Central Regional Educational Laboratory.

Howley, C., & Bickel, R. (2000). *Results of four-state study: Smaller schools reduce harmful impact of poverty on student achievement.* Washington, DC: Rural School and Community Trust.

Ingersoll, R. (1997). Teacher turnover and teacher quality: The recurring myth of teacher shortages. *Teachers College Record, 99*(1), 41-44.

Ingersoll, R. (2001). Teacher turnover and teacher shortages. *American Educational Research Journal, 38*(3), 499-534.

Kane, T., Staiger, D., & Geppert, J. (2002). Randomly accountable. *Education Next, 2*(1). Retreived October 11, 2002, from http://www.educationext.org/20021/56.html

Killeen, K., & Sipple, J. (2000). *School consolidation and transportation policy: An empirical and institutional analysis* (working paper). Washington, DC: Rural School and Community Trust.

Linn, R. L., Baker, E. L., & Betebenner, D. W. (2002). Accountability systems: Implications of requirements of the No Child Left Behind act of 2001. *Educational Researcher, 31*(6), 3-16.

National Association of State Boards of Education. (1998). *The numbers game: Ensuring quantity and quality in the teaching workforce.* Alexandria, VA: Author.

National Commission on Teaching and America's Future. (1997). *Doing what matters most: Teaching for America's future.* New York: Author.

National Education Association. (1998). Status of public education in rural areas and small towns—a comparative analysis. Retreived October 11, 2002, from http://www.nea.org/rural/companal-rural.html

North Carolina Public School Forum. (2001). *2000 local school finance study.* Raleigh, NC: Author.

North Carolina Public School Forum. (2002). *2001 local school finance study overview.* Raleigh, NC: Author.

Olson, L. (2000). Quality Counts 2000: Finding and keeping competent teachers. *Education Week, 19*(18), 12-18.

Prince, Cynthia D. June 2002. Higher Pay in Hard-to-Staff Schools: The Case for Financial Incentives. Arlington, VA: American Association of School Administrators.

Rural School and Community Trust. (2000). *Why rural matters: The need for every state to take action on rural education.* Washington, DC: Author.

U.S. Department of Education. (2000). *Eliminating barriers to improving teaching.* Washington, DC: Author.

U.S. Department of Education. (2001). *Overview of public elementary and secondary schools and districts: School year 1999-2000* (NCES Statistical Analysis Report). Retrieved September 4, 2002, from http://nces.ed.gov/pubs2001/overview/table08.asp

Voke, H. (2002). *Understanding and responding to the teacher shortage* (ASCD Infobrief). Washington, DC: Association for Supervision and Curriculum Development.

Wayne, A. J. (2000). Teacher supply and demand: Surprises from primary research. *Education Policy Analysis Archives, 8*(47). Retrieved November 12, 2002, from http://epaa.asu.edu/epaa/v8n47.html

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Resources

American Association of School Administrators
www.aasa.org

Association for Supervision and Curriculum Development
www.ascd.org

Education Policy Analysis Archives
http://epaa.asu.edu

ERIC Clearinghouse on Rural and Small Schools
www.ael.org/eric

KnowledgeWorks Foundation
www.kwfdn.org/

National Association of State Boards of Education
www.nasbe.org

National Education Association
www.nea.org

Rural School and Community Trust
www.ruraledu.org

U.S. Department of Education
www.ed.gov
www.NoChildLeftBehind.gov/

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Footnotes

1 Includes schools and districts with locale codes of either 6, 7, or 8. These are the classifications used to determine eligibility for Rural Education Achievement Program programs.
(6) Place not within a metropolitan area with a population of at least 2,500 but less than 25,000.
(7) Place with a population of less than 2,500 outside a metropolitan.
(8) Place with a population of less than 2,500 within a metropolitan area.

2 For additional information about the Kentucky Virtual High School

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